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(54) Title: A METHOD OF DECODING VARIABLE LENGTH PREFIX CODES

(57) Abstract: The method disclosed may be used together with any prefix oriented decoding method to enable faster decoding of variable length codes when a subset of most frequently used codes with relatively short prefixes may be determined. An embodiment of the present invention reads a number of bits, not less than the maximal possible length of a code, from a bit stream. Then a predetermined number of bits is selected and used as an index to a data structure that contains at least a decoded value and a validity indicator, along with other pre-decoded data, namely: prefix type and length, maximal code length for a group of codes, actual code length, the number of bits to return to the bit stream, etc. The validity indicator is used to determine whether to proceed with the decoding operation, or obtain the valid decoded value from the data structure and return excess bits to the bit stream. If the decoded value is indicated to be invalid, the decoding operation is continued, and a decoding method that estimates the length of the code prefix and the number of significant bits corresponding to the length estimated is applied to the bits initially read from the bit stream.